### III. REMARKS

### A. Status of the Claims

The Office Action mailed July 7, 2008 has been received and carefully considered. Claims 1-2, 5-8 and 12-22 are currently pending, of which claims 1 and 15 are independent claims. Claims 3, 4, 9, 10 and 11 are cancelled. No claims have been amended, added or withdrawn. Applicant respectfully requests reconsideration of the rejections of the pending claims for at least the following reasons.

## B. Claim Rejections under 35 U.S.C. § 103(a)

The Office Action rejects claims 1-2, 5-8 and 12-22 as allegedly rendered obvious by U.S. Publication No. 2004/0198220 to Whelan et al. ("Whelan") in view of U.S. Publication No. 2001/0023446 to Balogh ("Balogh") and U.S. Patent No. 5,661,806 to Nevoux et al. ("Nevoux"). Applicant traverses the rejection because the Office Action has failed to establish a <u>prima facie</u> case of obviousness.

In order to establish a <u>prima facie</u> case of obviousness, the combined or modified references must teach or suggest all claim limitations. <u>See MPEP</u> § 2142.

On page three, the Office Action alleges that Whelan discloses a method of authenticating a client to one or more computing devices. <u>See</u> Office Action, Page 3. Specifically, the Office Action cites to Fig. 2A, item 50 in support of the allegation that Whelan teaches or suggests "transmitting a first challenge"; and cites to Fig. 2A, item 66 in support of the allegation that Whelan discloses "receiving a second challenge." <u>See Id.</u>

On the balance of pages three to five, the Office Action alleges that Whelan, in combination of Balogh and Nevoux, teach or suggest the balance of the limitations of claims 1 and 15 and therefore render claims 1 and 15 obvious. See Office Action, Pages 3-5.

Applicant respectfully disagrees and submits that claims 1 and 15 (and the claims that depend from claims 1 and 15) are patentable over Whelan in combination with Balogh and Nevoux because a prima facie case of obviousness has not been made since the Office Action does not make a prima facie case that each of the limitations of claim 1 is taught or suggested.

Independent claim 1 recites: "transmitting, by the client to the computing device, a first challenge, wherein said first challenge comprises an encrypted first random number . . . being encrypted with said first cryptographic key. . .; receiving, by the client from the computing device, a second challenge, wherein said second challenge comprises an encrypted second random number . . . generated at said computing device and encrypted with a second cryptographic key" (emphasis added). Independent claim 15 recites "transmit, by the client to the one of said one or more computing devices; . . . receive, by the client from the one of said one or more computing devices, a second challenge, wherein the second challenge comprises an encrypted second random number . . . generated at the one of said one or more computing devices and encrypted using a second cryptographic key." (emphasis added). Applicants submit that the claimed limitations are not disclosed in Whelan, Balogh or Nevoux, alone or in combination.

Page three of the Office Action cites to Fig. 2A of Whelan and asserts that "since the outcome of the decision branch of Item 66 feed the response back to the MU indicating there are more AP available; it reads on the second challenge." See Office Action, Page 3. The Office Action makes such allegation in support of an argument that Whelan teaches the claim 1 and 15 limitations: "transmitting, by the client to the computing device, a first challenge, wherein said first challenge comprises an encrypted first random number . . . being encrypted with said first cryptographic key . . .; receiving, by the client from the computing device, a second challenge, wherein said second challenge comprises an encrypted second random number . . . generated at said computing device and encrypted with a second cryptographic key" (emphasis added); and "transmit, by the client to the one of said one or more computing devices; . . . receive, by the client from the one of said one or more computing devices, a second challenge, wherein the second challenge comprises an encrypted second random number . . . generated at the one of said one or more computing devices, a second challenge wherein the second challenge comprises an encrypted second random number . . . . generated at the one of said one or more computing devices, a second challenge wherein the second challenge comprises an encrypted using a second cryptographic key" (emphasis added), respectively.

Whelan may disclose a system having an MU 28 with a roaming control client ("RCC") 32 on the MU, an access point ("AP") 20, a security server 10 and a roaming control server 12. See Fig. 2A. Whelan may also disclose that an MU 28 initiates an association process 50 to an AP 20 on a sub-network by: (1) the MU detecting 51 an available AP; (2) the RCC on the MU

invoking 52 the correct set of association control lists based on the sub-network identification; (3) the MU determining 58 whether the detected AP is on the preferred association control list or on the excluded AP association list; (4) the MU determining whether a wired network connection is available if the AP is on the excluded AP association list; and (5) the MU detecting another AP if there is no wired connection available. <u>See</u> Whelan, Paragraphs [0049] - [0051]; Fig. 2A.

Applicant respectfully submits that, to the contrary of the arguments in the Office Action, the above limitations are not taught or suggested in Whelan. Referring to Whelan, the arrow of Fig. 2A is not indicative of feeding back information to the mobile unit ("MU") 28 from outside of the MU, and therefore the MU receiving a second challenge, as alleged. See Whelan, Fig. 2A. Rather, Fig. 2A is a process flow diagram wherein the arrow from block 59 to block 51 indicates that operational step within the MU wherein, if there is no wired network connection available, the next step within the MU is to perform the process of detecting an AP again. See Whelan, Paragraphs [0049] - [0051].

Accordingly, Whelan may disclose that the process of determining whether the MU should repeat the process of detecting subsequent APs after the first AP has been detected occurs within the MU. See Whelan, Paragraph [0049]. The MU does not receive a second challenge from the AP, as erroneously implied on page three of the Office Action. See Office Action, Page 3. Rather, the association process is a process that occurs entirely within the MU as it is conducted by the RCC, which is on the MU. See Whelan, Paragraphs [0049] - [0051]. Therefore, the portion cited on page three of the Office Action is not indicative of feeding back information to the MU 28 from outside of the MU, and therefore the MU receiving a second challenge, as alleged.

As admitted on page four of the Office Action, Balogh, neither, alone or in combination with Whelan, teach or suggest "transmitting, by the client to the computing device, a first challenge, wherein said first challenge comprises an encrypted first random number . . . being encrypted with said first cryptographic key . . .; receiving, by the client from the computing device, a second challenge, wherein said second challenge comprises an encrypted second random number . . . . generated at said computing device and encrypted with a second cryptographic key" (emphasis added); and "transmit, by the client to the one of said one or more

computing devices; . . . receive, by the client from the one of said one or more computing devices, a second challenge, wherein the second challenge comprises an encrypted second random number . . . generated at the one of said one or more computing devices and encrypted using a second cryptographic key" (emphasis added), respectively. See Office Action, page 4.

Further, Nevoux, neither alone nor in combination with Balogh and/or Whelan, cures the above deficiencies.

On pages four and five, the Office Action cites to the SIM column of Fig. 2 in Nevoux as allegedly teaching or suggesting the above limitations. Applicant disagrees.

Nevoux may disclose an authentication process between a terminal and a user module wherein a SIM of the user module performs a first cryptographic function, AG, to calculate Ks, and the terminal performs a second cryptographic function, AT, to calculate SRES. See Nevoux, Fig. 2. However, Ks and SRES are not transmitted and received between the SIM of the user module and the terminal. See Id. Instead, Ks is transmitted from the SIM of the user module to the terminal but SRES is transmitted from the terminal to the VLR. See Id. Therefore, the user module and the terminal do not transmit the first and second challenge between one another.

Therefore, the claim 1 limitations "transmitting, by the client to the computing device, a first challenge . . . ; receiving, by the client from the computing device, a second challenge . . . " (emphasis added) and the claim 15 limitations "transmit, by the client to the one of said one or more computing devices, a first challenge . . . ; receive, by the client from the one of said one or more computing devices, a second challenge . . . " (emphasis added) are not taught or suggested.

For at least this reason, neither Whelan, Balogh nor Nevoux, alone or in combination, teach or suggest all of the claim limitations of claims 1 and 15. For at least this reason alone, the Office Action does not make a prima facie case of obviousness with regard to claims 1 and 15. Accordingly, Applicant respectfully requests that the rejection of claims 1 and 15 be withdrawn and that these claims be allowed.

Claims 2, 5-8 and 12-14 depend from and therefore incorporate the limitations of claim 1, while claims 16-22 depend from and therefore incorporate the limitations of claim 15. See 35 U.S.C. § 112, ¶ 4. Therefore, claims 2, 5-8, 12-14 and 16-22 are allowable for at least the

reasons provided for claims 1 and 15, as well as for their additional limitations. Accordingly, Applicant respectfully requests that the rejection of claims 2, 5-8, 12-14 and 16-22 also be withdrawn and that these claims be allowed.

# IV. CONCLUSION

In view of the foregoing, it is respectfully submitted that the present application is in condition for allowance, and an indication of the same is courteously solicited. The Examiner is cordially invited to contact the undersigned by telephone at the below-listed telephone number, in order to expedite resolution of any outstanding issues. Applicant believes that no fees are necessary to maintain the instant application pending. However, should the Commissioner

reasons provided for claims 1 and 15, as well as for their additional limitations. Accordingly, Applicant respectfully requests that the rejection of claims 2, 5-8, 12-14 and 16-22 also be withdrawn and that these claims be allowed.

### IV. CONCLUSION

In view of the foregoing, it is respectfully submitted that the present application is in condition for allowance, and an indication of the same is courteously solicited. The Examiner is cordially invited to contact the undersigned by telephone at the below-listed telephone number, in order to expedite resolution of any outstanding issues. Applicant believes that no fees are necessary to maintain the instant application pending. However, should the Commissioner determine that any fees are necessary, the U.S. Patent and Trademark Office is authorized to charge such fees to the undersigned's Deposit Account No. 50-0206.

Respectfully submitted, HUNTON & WILLIAMS LLP

Dated: 80th 20, 2008

Deidra D. Ritcherson Registration No. 55.574

Hunton & Williams LLP Intellectual Property Department 1900 K Street, N.W., Suite 1200 Washington, DC 20006 (404) 888-4060 (Telephone) (404) 888-4190 (Facsimile)